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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,209	06/04/2001	Neal A. Brown	10431-005001	6091
20985	7590	12/05/2005	EXAMINER	
FISH & RICHARDSON, PC			SINGH, SUNIL	
P.O. BOX 1022			ART UNIT	
MINNEAPOLIS, MN 55440-1022			PAPER NUMBER	
			3673	
DATE MAILED: 12/05/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/875,209

Applicant(s)

BROWN ET AL.

Examiner

Sunil Singh

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 and 41-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 9, 26, 27 and 33 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-25, 28-32, 34-39 and 41-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

HC

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 30 and 37-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The disclosure does not enable one skilled in the art to make and/or use the invention as described in claims 30,37-38. In particular, a "rotatable riser".

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 12 are confusing because it is not clear how "an external riser sheath" and "a fixed internal system" relate back to a "riser pipe" and "an annular sheath" as called for in claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 10, 13-20, 22-24, 34, 36, 39, 42-49 are rejected under 35 U.S.C.

103(a) as being unpatentable over Pollack '286 in view of Ouellet (US 2663276).

Pollack discloses a marine riser comprising a riser pipe (30), an annular sheath (156) surrounding the riser pipe and at least one pair of nozzles (see col. 6 lines 5-12). System (see col. 6 lines 10+) for pumping water through the nozzles. Pollack discloses the invention substantially as claimed. However, Pollack is silent about pumping the water through the conduit and out of the nozzles. Ouellet teaches pumping fluid through a conduit (25) and out of nozzles (17,22,26). It would have been considered obvious to one of ordinary skill in the art to modify Pollack and include pumping fluid (water) through the conduit and out of the nozzles as taught by Ouellet since this protects the fluid transporting means from wind, waves and current forces.

With regards to claim 24, it would have been considered obvious to include a buoyancy ring as called for in claim 24 since caissons notoriously have buoyancy means within their interiors.

7. Claims 5-8, 11, 35, 37, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack in view of Ouellet as applied to claims 1, 34, 39 above, and further in view of Smith '504.

Pollack (once modified) discloses the invention substantially as claimed. However, the (once modified) Pollack is silent about having a rotatable sheath which includes a ring gear, pinion gear and gear motor. Smith teaches a rotatable sheath (24)

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which includes a ring gear (40), pinion gear (50) and gear motor (42). It would have been considered obvious to one of ordinary skill in the art to further modify the (once modified) Pollack to include the rotating means as taught by Smith in order to reduce vortex induced vibration.

8. Claims 5-6, 8, 11-12, 35, 37-38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack in view of Ouellet as applied to claims 1, 34, 39 above, and further in view of Brahtz '352.

Pollack (once modified) discloses the invention substantially as claimed. However, the (once modified) Pollack is silent about having a rotatable sheath which includes a ring gear, gear motor and controller. Brahtz teaches a rotatable sheath (12) which includes a ring gear (14), gear motor (20) and controller (18). It would have been considered obvious to one of ordinary skill in the art to further modify the (once modified) Pollack to include the rotating means as taught by Brahtz in order to reduce vortex induced vibration.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack in view of Ouellet as applied to claim 20 above and further in view of Purcell, Jr. or Payne (US 3614032, 3763810).

Pollack (once modified) discloses the invention substantially as claimed. However, the (once modified) Pollack is silent about having a retractable tail. Purcell, Jr. and Payne both teach a retractable tail (42, 199). It would have been considered obvious to one of ordinary skill in the art to further modify the (once modified) Pollack to

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make his tail retractable as taught by either Purcell, Jr. or Payne in order to avoid damage to the tail when not in use.

10. Claims 25, 28, 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack in view of Ouellet '276 and Watson (US 4300855).

Pollack discloses the invention substantially as claimed. However, Pollack is about pumping the water through the conduit and out of the nozzles and about having a telescoping sheath. Ouellet teaches pumping fluid through a conduit (25) and out of nozzles (17,22,26). Watson teaches a telescoping sheath (see Figs. 5, 10). It would have been considered obvious to one of ordinary skill in the art to modify Pollack and include pumping fluid (water) through the conduit and out of the nozzles as taught by Ouellet and by making their sheath telescoping as taught by Watson since this protects the fluid transporting means from wind, waves and current forces and in order to be able to use the marine riser in both deep and shallow waters.

With regards to claim 30, the structure is rotatable since the word rotatable means capable of rotating.

With regards to claim 31, the diameter of the cylindrical sections decreases (see Figs. 5 and 10 of Watson).

11. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack in view of Ouellet and Watson as applied to claim 25 above, and further in view of Smith '504 or Brahtz '352.

Pollack (as modified above) discloses the invention substantially as claimed. However, the (above modified) Pollack is silent about having a rotatable

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sheath/cylindrical section. Smith and Brahtz both teach rotatable sheath/cylindrical sections (24, 12 respectively). It would have been considered obvious to one of ordinary skill in the art to further modify the (above modified) Pollack to include the rotating means as taught by either Smith or Brahtz in order to reduce vortex induced vibration.

Allowable Subject Matter

12. Claims 9, 26-27, 33 are allowed.

Response to Arguments

13. Applicant's arguments with respect to claims 1, 34, 39 and 46 have been considered but are moot in view of the new ground(s) of rejection.

14. Applicant's arguments filed 2/3/05 have been fully considered but they are not persuasive. Applicant argues that Pollack does not teach a "sheath" but instead a caisson. A "sheath" is defined as a cover and a "caisson" is a cover, as a matter of fact it protect the risers similar to applicant's sheath protects the risers. Applicant argues that his structure is submerged while Pollack floats at the sea surface. The examiner would like to direct applicant to Figures 1-2 of Pollack, wherein 95 percent or so of the structure is submerged. Applicant argues that his invention "discharges water" while Pollack produces "thrust force". The examiner would like to direct applicant to (col. 6 lines 5-15, col. 5 lines 55-65, and cols. 1 and 2) of Pollack wherein it is taught that thrust force is created by discharging of water which by applicant's disclosure see page 7 of

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applicant's specification, reduces VIV. This clearly contradicts applicant's assertion that Pollack fails to disclose a structure that reduces VIV.

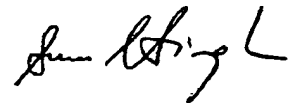
Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (571) 272-7049. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sunil Singh
Primary Examiner
Art Unit 3673



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5/13/05

SUNIL SINGH
PRIMARY PATENT EXAMINER